



California Update





California NGV Coalition &

California NGV Partnership

April 14, 2004



Goal

- Build a <u>sustainable</u> future for natural gas as a transportation fuel
 - Define sustainability for each stakeholder
 - Define actions needed to achieve
- Position the NGV industry in the "path to hydrogen" debate



NGV Stakeholders

- **OEMs**
 - ▶ LD OEMs (Honda, Ford, GM, Chrysler)
 - HD Engines (CWI, John Deere, CAP/CAT, Mack, DDC)
 - Vehicle packagers ???
 - Conversion Industry (BAF Technologies)
- Utilities
 - ▶ PG&E
 - Sempra Utilities



NGV Stakeholders (cont.)

- Fuel Providers
 - Clean Energy
 - Pinnacle CNG
 - ALT
 - Trillium
 - Hanover



NGV Stakeholders (cont.)

- Others
 - Air Pollution Control Districts
 - California Agencies (CEC, CARB, CalEPA)
 - Federal Agencies (DOE, NREL, EPA)
 - Equipment Suppliers
 - Fleets
 - Cities and Municipalities
 - Environmental Community



Markets

- Transit*
- Refuse*
- Class 8*
- Delivery
- School buses
- Shuttle buses*

- Street sweepers
- Taxis*
- Municipal fleets
- Police fleets*
- Passenger cars, trucks & vans*



Denotes markets where there are significant issues



Product Issues

- Ford announcement to drop NGVs
 - Taxi market
 - Shuttle
 - Municipal fleet
- BAF Technologies ability to pick up Ford product line
 - Availability of gas ready engine
- Small Automotive Manufacturing
- Other LD OEMs at risk?



Product Issues (cont.)

- Cummins Westport decision to not introduce ISX engine
- Problems with CAP/CAT refuse trucks
- ▶ CAP/CAT release of C13 engine
- DDC statement that they will not produce natural gas engine in 2007
- Vehicle integration
- Mack



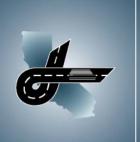
OEM Needs

- Sales to support
 - manufacturing
 - new product development
 - product expansion
- Pursue the politically correct opportunities



Infrastructure Issues

- LNG availability
- Fuel provider consolidation
- Universal access
- Hours of operation
- Potential loss of Fleet Star stations
- Launch of FuelMaker



Fuel Providers Need

- Throughput
 - make existing stations profitable
 - warrant capitalization of new stations
- New engine/vehicle products to expand market



Opportunities

- CARB Transit Rule Revisions
- New Administration in Sacramento
 - Positive environmental agenda
 - "Hydrogen Highway"
- Greenhouse Gas Legislation AB 1493
- Petroleum dependence/alt fuel
- Clean air initiatives
- State CLEAR Act



CARB Transit Rule

- Adopt dual path rule for transit in 2000
 - alt fuels or diesel
 - ▶ 50% of state on diesel path
- Diesel manufacturers
 - ▶ 2004-2006 standard (0.5 gram) won't be met
 - Option of NOX and PM control on engines not met
 - ▶ 2007 standard (0.2 grams) won't be met until 2010
- Alt Fuel Standards
 - 2.4 gram until 2007
 - 0.2 gram in 2007



Industry Recommendations

- Alternative fuel has exceeded standards
- Alternative fuel will meet 2007 standards (0.2 gram)
- Eliminate diesel path (failure to comply)
- All transit properties be placed on alternative fuel path



Next Steps for Transit Rule

- Provide written comments on workshop proposals
- Identify supporters
- Brief ARB Board Members of advantages of eliminating diesel path
- Comment on final Staff Report (due out in early May)
- Participate and testify at ARB Board meeting in June



Changes in Sacramento

- Governor has positive environmental agenda
- Has appointed Terry Tammenin as Secretary of CalEPA
- Belief that environmental interests in California don't have to be sacrificed for business growth



"Hydrogen Highway"

- Initiative from the Governor's office this month
- Program to come from CalEPA (not CEC)
- Build 100-200 hydrogen fuel stations on California highways
- Workshops to define how this gets done
- Opportunity for lessons learned from natural gas market to be included
- Opportunity for natural gas industry to play a role
- Hydrogen to see the problems of infrastructure expansion, throughput, and vehicle availability



Greenhouse Gas Legislation -- AB 1493

- Legislation mandates rules to control green house gases (GHG)
- CARB authority for controlling GHG
- GHG doesn't necessarily mean efficiency
- Natural gas can make a positive contribution
- Alternative compliance strategy for manufacturers



Air Pollution Control Districts

- Viable transportation programs to achieve clean air goals
- Transportation initiatives to address health risks (PM)
- Transportation initiatives to address Environmental Justice issues



Petroleum Dependence and Alternative Fuels

- Target energy security and fuel diversity for California
- Recommendations
 - ▶ Reduce petroleum use by 15% over 2003 levels
 - Increase alternative fuels by 30% by 2030
- What legislative mandate needed for state to pursue?
- How do regulatory agencies make this happen?



Clean Air Initiatives

- Air quality initiatives dependent upon public funds – but state is broke
- Coalition investigating how big the cleanup needed to achieve SIP
- ▶ How much will it cost \$ billions
- Potential funding through fees on gasoline and diesel
- Natural gas is one of compliance paths pushed by some APCDs



Conclusions

- Exactly where we have always been!!
 - Good environmental message
 - Good energy security message
 - Many obstacles
 - New opportunities
- Running out of time? (TBD)